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ABSTRACT

This series of position papers in reading and language arts was sponsored by the Reading Center of University of Maryland in order to stimulate the kinds of thinking and reactions which might lead to improvement of teacher training programs and of reading programs on all levels. The topics treated reflect both traditional concerns of educators, and issues and interests which signal new areas of emphases in the field. Titles of the papers are: A Competency Program in the Undergraduate Reading Course; Children's Responses to Stipulated Literature Selections; Jamaicanism: Its Influence on the Spoken and Written Communication of Elementary School Pupils; Standardized Tests: Use and Misuse; Cloze Procedure as a Predictor of Comprehension in Secondary Social Studies Material; A Psycholinguistic Look at Reading: Definitions and Directions; and Questioning for Thinking: A Teaching Strategy that Makes a Difference for Disadvantaged Learners. References are included following most of the papers. (Author/AW)

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READING AND THE LANGUAGE ARTS:
APPLICATION AND RESEARCH

POSITION
PAPERS
IN
READING

U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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MARYLAND READING INSTITUTE

COLLEGE OF EDUCATION · UNIVERSITY OF MARYLAND

Position Papers

from the

READING CENTER SEMINARS

Lester H. Birchall, Editor
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University of Maryland

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PREFACE

The Reading Center of the College of Education, University of Maryland, has sponsored a series of position papers in reading and the language arts. The papers were presented for discussion during seminar sessions taking place from the spring of 1969 through the spring of 1970.

The topics treated in the papers reflected both traditional concerns of educators and issues and interests which signaled new areas of emphases in the field. The traditional were represented by papers offering new insights and fresh suggestions for teacher training and for the evaluation of standardized tests results. A long overdue shift in emphasis from approaches and techniques related to decoding to a focus upon the cognitive component of reading was evidenced by those papers dealing with aspects of comprehension. Part of the credit for the current renewal of interest in comprehension might be attributed to the fields of psycholinguistics and dialectology, topics discussed in two of the papers.

The intent of this position paper project was to stimulate the kinds of thinking and reactions which might

lead to improvement of teacher training programs and of reading programs on all levels. If just one of these papers offers you an exciting idea, our goal will have been accomplished.

L.B.

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A COMPETENCY PROGRAM IN THE UNDERGRADUATE READING COURSE

Robert M. Wilson

Is it possible to develop undergraduate courses in education which permit students to develop competencies in teaching and which allow for the individual differences of students coming into such courses? Although such a program will not be easy to teach and might cause more problems than it solves, it is the position of this paper that we should study the possibilities of establishing competency courses.

Traditional techniques

As you know, the traditional methods courses usually involve variations around one or more of several themes. One theme is that the professor has a lot to tell the students. Students are expected to listen to his talking, take notes, read related literature, and pass examinations. The examinations are based on the talking and/or the literature. The student competes for a grade with his classmates. The influence of something referred to as a "normal curve" is used to justify the grading system so that grades earned show

a spread of A's, B's, C's, D's, and occasionally F's. Normally the student is expected to earn a C or better. However, there is no agreement, about what a C means - nor is there any agreement concerning what a C student is able to do in a classroom. My guess is a C means that a student has a mediocre understanding about the course - if such understanding reflects classroom competency it must surely be a coincidence.

Another theme is based around the same type of course, but instead of basing grades around a curve distribution the grades are based on a standard set by the professor. In such cases, an A is technically possible for all students (but not really because the standards are usually set so high that most students will not reach the A mark). In such courses the student works against himself (or against the prof) not against other students. Grades in these courses tend to be higher....and are the butt of much criticism, i.e., the professor is too easy. The meaning of the grades are as disturbing as with the previous theme discussed.

A third general theme is that the professor has the students do most of the talking. In these courses the professor either assigns reports which students give to students or the chairs are arranged in a large circle to facilite the discussion of assigned topics. In such courses students who talk well obtain the best grades. Professors in these courses use either a "curve" grading system or a "standards" grading system. Grade meaning is equally difficult to interpret.

While many of my collegues use other methods or themes, it seems to me that we have not changed our technique much from the basic themes already discussed. We are teaching <u>about</u> method, <u>about</u> content, and <u>about</u> teaching. It is my contention that our themes have three basic weaknesses:

1. We do not provide instruction which directly helps the student develop skills i teaching.
2. We encourage mediocre performance by staying with themes which (a) do not consider the competency of the student entering the course, and (b) do not consider different learning rates within the course.

3. We encourage mediocre performance by presenting the same content to all students regardless of their needs. The student who learns the fastest and remembers the most seems to get the best grade. Whether that grade reflects ability to teach or not is mostly conjecture.

Suggested Program

It seems as though it should be possible for all of the professors who teach a given methods course to agree upon several teaching competencies which all students who take the course should strive to acquire. Could we sit down and say, "A student who takes EDEL 153, Teaching of Reading, should be able to....(1)....(2)....(3)....(4)....". Developing these competencies then would be the major thrust of the course. The professor could present information concerning each area of competency, demonstrate teaching techniques within the competency, bring related materials into the classroom for students to examine, permit students to practice the competency with peers, and FINALLY have the student demonstrate

the competency in a classroom with children. Each student could work at his own pace. When the student is ready to demonstrate his competency he could do so. When one competency has been demonstrated in a satisfactory manner he could move on to the next one. When he completes his final competency the basic requirements of the course are satisfied. Such students could select one of a "x" number of areas for investigation either as individuals or in small seminar groups.

The student who cannot demonstrate the competency in a given semester (man-made at 15 weeks) continues in the course until he can demonstrate the competency. His speed of learning is not a basis for the grade, rather his willingness and ability to develop the competency. A system will need to be developed to permit the "incomplete" student to continue study and practice.

The grading system should also be adjusted. Once competencies are met, the student has satisfactorily completed the methods course. I'd suggest a "pass" or an "incomplete" arrangement with the pass grade holding A or B value for

transcript purposes, or an "I"-"incomplete". In either case, it seems important to take the emphasis away from the grade and replace it with emphasis upon the learning which has been determined to be desirable.

Advantages

This writer sees several obvious advantages which could result from courses developed along this theme:

1. Instead of being able to say that a student earned a "C" in reading, we can describe what it is we know the student can do. To his future employer, his graduate school, or anyone else who is interested we can say, this student can (1)...(2).... (3)....(4)....(5)....
2. By placing emphasis upon the competency and not on the grade, the student can more clearly see the purpose of the course and can work toward completion at any rate he so desires.
3. The professor can provide instruction in any manner he so desires and he can include other features

of the course. But, all courses would hold some very basic competencies in common.

4. Speed with which a student can learn will not be to his advantage or disadvantage. Speed of learning will be replaced by thoroughness of learning.

A Limitation

The major problem, one which must be carefully considered in order to be avoided, is a tendency for the student to "ape" the professor as he strives for competency. Competencies must be established in such a manner as to permit differences in teaching style and allow for creativity on the part of the teacher.

And, so.....

Many of our staff are experimenting with ideas such as those suggested in this paper. Many of the suggested activities in this paper are gleaned from discussion with other professors. This writer is not trying to develop the WILSON THEME. He is taking the position that a department such as ours can no longer continue undergraduate education in teacher

education in the same manner as undergraduate education has been conducted for years. The time is ripe for change - we have a staff which is capable of changing - we should try it NOW.

Reactions to Dr. Wilson's paper:

1. Too often students only gain ideas and information from a reading methods course with little or no opportunity to implement this knowledge with children in the classroom.

2. Competency requirements should be structured in a manner flexible enough to allow for creativity and expression of individual differences in personality and teaching style.

3. Methods courses based upon competencies should not replace the student teaching experience. Whereas individual courses would require the demonstration of specific competencies, the student teaching experience would continue to require demonstration of one's ability to synthesize learnings from all courses.

4. A methods course based upon demonstration of competencies requires consideration of learning hierarchies which describe intermediate skills that lead to attainment of competency in specific areas. Formation of behavioral objectives to serve as guidelines in evaluating student competency should be an essential part of the planning and development of the course.

CHILDREN'S RESPONSES TO STIPULATED LITERATURE SELECTIONS

Jessie A. Roderick

The purpose of this paper is threefold: (1) to highlight the renewed interest in literature for children; (2) to report results of a content analysis of sixth graders' responses to stipulated books; (3) to encourage further research and exploration of ideas having implications for the literary experiences of children.

Current Status of Literature for Children

Concern for developing the imagination and attempts to apply some linguistic concepts and content to the language arts curriculum have prompted a re-examination of the function of children's literature in the school. The newly-formed Committee on Literature for Children and Adolescents (Conference on English Education - NCTE) is providing added impetus to the movement. Evidence of this renewed interest is found in English curricula which have added more literary selections to existing sequences or which, in fact, have presented literature as the core of the communications program.

The state of literature for children in American schools is generally unsettled in terms of which experiences when, but a program appears to be desirable. Recent proposals include a suggested sequence based on a developmental point-of-view in which children as young as two experience the world of fantasy and imagination through much "topsy-turvy" verse (Chukovsky, 1963). This early exposure to fantasy helps the child interpret the real world. A more structured approach is offered by The Nebraska Curriculum Development Center (1966). Although developmental in a sense, the Nebraska program introduces children to most of the literary categories or genres at each grade level.

To establish a research basis for program development, specialists in children's literature have investigated youngsters' responses or reactions to free reading. The end products of most of these inquiries are lists of titles and types of books preferred by boys and girls of varying ages and intelligence. It has been shown, however, that children's responses to books can be structured so they reveal not only

title and category preferences but indications of where the readers are in terms of their ability to perceive different kinds of literature or how empathic they are in certain situations. Before this kind of information--essential to effective planning for and with children--can be obtained, more refined instruments must be designed. The data presented in the next section of this paper represent one attempt, admittedly a crude one, to explore in more depth children's responses to free reading.

Children's Responses to Stipulated Titles

One-hundred sixth graders were asked to read from a stipulated list of children's trade books and to tell whether they liked the books, did not like them, or thought they were all right. In addition, the subjects were asked to give reasons for their likes or dislikes. The content of their responses in which they told why they liked or disliked a book was examined and categories were derived by induction (Berelson, 1952). In turn, these categories were used in classifying the responses. The unit of content used

in this analysis was the complete response or theme. A brief definition of the categories employed follows:

Character: Included in this category were statements referring to the living subject or subjects of the story as specific individuals or specific groups of individuals. ("I like J.F.K.".)

Literary Components and Format: Statements referring to situation, plot, theme, setting, content, style of writing, format, and type of literature were assigned to this category.

Reader Involvement: Any statement which involved a comparison, conjecture, identification with, interpretation, association, empathy or any departure from a restatement or evaluation of the manifest content was placed in this category. Reader involvement also implies demands made on the reader. ("I never thought of it that way.")

External Influences: References to television, radio, movies, current happenings, or availability of books were grouped in this category.

Table 1 summarizes by frequency count and percentage the children's statements according to category distributions.

TABLE 1

FREQUENCIES AND PERCENTAGES OF CHILDREN'S COMMENTS

ACCORDING TO CATEGORY DISTRUBUTIONS

Category	Number of Comments	Percentage of Total
Character	69	8.0
Literary Components and Format	719	83.0
Reader Involvement	65	7.5
External Influences	13	1.5
	866	100.0

Examination of individual responses in each category would provide some indication of where these children were in their ability to perceive plot, theme, and setting; the external factors that influenced their reading the selection; and where they were in their ability to project themselves beyond the printed page. In view of the expressed concern for developing the individual's creative imagination and sensitivity, selected comments from among those categorized as 'reader involvement' are presented as illustrations of what teachers can learn about children as they experience deeply the books they read.

"Because you felt like you were there." 1.*

"...almost like true life." 2. "Wonder if it was real or not." 3.

"The children were a lot of fun to be with." 4.

"Didn't make much sense." 5.

"Because it had a lot of feeling." 6.

"Because it shows what a person can do if they put enough effort forth." 7.

* Title of books commented about are listed in Appendix.

"You couldn't tell what was going to happen next." 8.

"It wasn't as exciting as I though it would be." 9.

"I couldn't get my mind on it." 10.

"Everybody knows a girl can't throw a boy in the top of trees." 11.

"I wish I could live like that." 11.

"I wish I had a house like that." 12.

"Because I never believed all those things could happen to one person." 13.

"I never though about anything like that." 14.

"...and they were different from any other family." 14.

"...and the things they did seemed very unnatural." 10.

"exciting in a pig's way." 15.

"I learned a lot about the old ways of life." 16.

"None of the rhymes made any sense." 17.

The above responses suggest the subjects' ability

to go beyond restating and evaluating the content of the books. From another perspective, the children's reactions can imply the demands which literary selections can make on the reader. Literature often requires that the reader identify with others, react emotionally, imaginatively, and sensitively, visualize, seek meaning from both content and form, empathize, understand, and make the leap of faith--suspend reason.

Discussion and Implications for Literature in the Elementary School

Information gained by noting children's expressed reactions to literature can be of value to teachers as they plan curriculum and guide and encourage children in their reading. However, what happens to the reader as he interacts with the story may be even more important. As the child responds creatively and imaginatively to a selection he may be clarifying his own ideas, trying out new ones, standing in someone else's shoes, or building his self-concept. Writing responses to books is one way of communicating

reactions, skills, and knowledge, but sharing ideas in verbal interaction is another approach--one which lends itself readily to classroom procedure.

Book discussions in which children are encouraged to express ideas similar to those subsumed under "reader involvement" help children grow in their understanding of self and of man as a human being. Discussions can also contribute to the development of the process skills of communicating, perceiving, loving, creating, and valuing as defined by Berman in her proposal for a curriculum which encourages the growth of contributing, responsible individuals (1968).

In addition to providing opportunities for experiencing feelings, trying on new roles, viewing an action from another perspective, and evaluating, group discussions stimulate attentive listening to what is said and responsible reaction to another's ideas. Thinking skills can also be enhanced when teachers and children engage in asking higher level questions which call for divergent and evaluative thinking.

Although instruments for formally assessing children's reactions to literature remain relatively crude, children need to be encouraged to think about and talk about what they read. This talking out, acting out, or whatever form it takes flourishes in an atmosphere of safety and trust--an atmosphere in which the humanity of man is explored with sensitivity and dignity and in which the imagination has no bounds.

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Berelson, B. Content Analysis in Communication Research. Glencoe, Illinois: Free Press, 1952.

Berman, L. M. New Priorities in the Curriculum. Columbus, Ohio: Merrill, 1968.

Chukovsky, K. From Two to Five. (Translated and edited by Miriam Morton). Berkeley, California: University of California Press, 1963.

Nebraska Curriculum Development Center. A Curriculum for English. Lincoln, Nebraska: University of Nebraska Press, 1966.

- APPENDIX -

Authors and Titles of Books Read by Children

Author	Title
1. Alcott, Louisa	Little Women
2. Clemens, Samuel	Adventures of Tom Sawyer
3. Henry, Marguerite	Misty of Chincoteague
4. Enright, Elizabeth	Gone-away Lake
5. Estes, Eleanor	The Moffats
6. Frank, Anne	Diary of a Young Girl
7. Keller, Helen	Story of My Life
8. Knight, Eric	Lassie Come Home
9. L'Engle, Madeline	A Wrinkle in Time
10. Travers, Pamela	Mary Poppins
11. Lindgren, Astrid	Pippi Longstocking
12. Sewell, Anna	Black Beauty
13. McCloskey, Robert	Homer Price
14. Norton, Mary	The Borrowers
15. White, E. B.	Charlotte's Web
16. Wilder, Laura I.	The Little House in the Big Woods
17. Merriam, Eve	It Doesn't Always Have to Rhyme

Reactions to Dr. Roderick's paper:

1. The availability of paperbacks makes it possible for many children to react to the same book or to books which develop a common theme.

2. As children respond to literature in small groups, many opportunities for stimulating imagination, creativity, and higher levels of thinking occur.

3. Group discussion may center around a specific book which all children have read, or around a specific theme which has been pursued through reading a variety of books. A thematic approach has the advantage of allowing the student to select reading material in which he is interested.

JAMAICANISM: ITS INFLUENCE ON THE SPOKEN AND WRITTEN COMMUNICATION OF ELEMENTARY SCHOOL PUPILS

D. R. B. Grant

One of the most important functions of the Primary School programme is the guidance of children through the functional development of the communication skills. Support for this opinion is found in Fries' (1940, p. 14) observation that, "in the matter of the English language it is clear that anyone who cannot use the language habits in which the major affairs of the country are conducted, the language habits of the socially acceptable of most of our communities, would have a serious handicap." It is obvious, therefore, that if primary school children are to employ language for expressing their ideas, feelings, and emotions, they must learn to use the acceptable code of the spoken and written language of their society. Every man has a native language which he has learned from his parents and his environment. Through this language he expresses himself with ease and fluency

according to the moulds of the vocabulary and grammer provided by that native language, which through usage, has been accepted as "accurate and proper." A teacher should be interested in helping her pupils to speak and write accurately, according to the code of expression approved by the society of which the school is a part. By helping her pupils to cultivate this accuracy, the teacher would not only be saving them from being misunderstood and criticised, but she would also be revealing to them a boundless field for individuality and beauty of expression.

THE PROBLEMS

Jamaica Local Examination Results

For some time, it has been recognised that the results of the Jamaica Local Examinations and the General Certificate of Education have been disturbingly unsatisfactory. Table I gives the breakdown of the results of the Jamaica Local Examinations for the years 1959-1961.

TABLE I

Breakdown of J.L.E. Results Showing Failures in English, 1959, 1960, 1961

	1959	1960	1961
1st Year J.L.E.			
No. of Candidates	7,677	6,963	5,860
No. of Passes	1,270	1,406	991
Percentage of Failure	83.5	79.8	83.
No. of Failures in English	3,417	3,129	2,570
2nd Year J.L.E.			
No. of Candidates	3,741	2,946	2,130
No. of Passes	620	369	546
Percentage of Failure	83.5	87.5	73.3
No. of Failures in English	3,120	1,979	1,478
3rd Year J.L.E.			
No. of Candidates	4,018	3,535	3,103
No. of Passes	585	435	592
Percentage of Failure	85.5	87.7	81.
No. of Failures in English	1,416	1,997	2,200

An examination of the Table shows that nearly 50% of the failures among the First Years resulted from unsatisfactory English papers. In the case of the Second Year candidates, 83.4%, 67.1%, and 69.4% of the failures in 1959, 1960 and 1961, respectively, were in the English paper. In 1961, 70.9% of the failures among the Third Year candidates was as a result of the substandard English scripts.

Primary School Examination Reports

Although more pupils seem to spend more time throughout their primary school career on the learning of English than any other subject, there is a quiet undercurrent of dissatisfaction with respect to the standard of the written English of the graduates of the schools. Upon scanning some recent Inspection Reports of each of 315 schools it was observed that:

(a) errors in "spelling, the use of the concord and tenses, and word functions" were mentioned in 102 reports,

(b) the need for "much practice in written English

with emphasis on the uses of Tenses," was recommended in 51 reports, and

(c) 67 of the reports emphasised that "English was characterised by limited vocabulary, inaccurate spelling, and lack of originality and spontaneity."

CONTRIBUTARY FACTORS TO THE PROBLEMS

Socio-economic and Teaching Conditions

Education in Jamaica is based, for the most part, on the British system, but its character has been shaped by many different forces, some of which are associated with the socio-economic conditions of the pupils, and the conditions under which classroom teaching is done.

Because the slave codes did not make provision for the education of the slaves, only a few mulatto and house-slaves were educated. During the 18th and 19th centuries, white fathers schooled their mulatto children in England, a practice which not only raised the social status of the

mulatto, but instilled in the slaves the belief that education was for the white and the mulatto only. The slaves and their early descendants developed such an indifferent attitude toward education, that in 1943 the quality of the education of 94% of the literate population did not exceed the primary level, and fully 218,000 (24% of the population over 10 years old) had not attended any school.

In 1960 nearly 248,000 children in the primary schools were being taught by about 5,000 teachers, of whom nearly 2,300 were untrained. The incidence of large classes, ranging from 50-72 pupils per teacher, due to the acute shortage of teachers, undermines and reduces the effectiveness of teaching quality, and the language programme in particular. Children who are taught by untrained teachers in crowded classrooms and under difficult conditions seem unable to escape receiving a substandard education.

Jamaicanism

Shoes Sale

Louise Bennett (1967, p. 65)

Small up yuh foot fe fit de boot!
Uno doan like cheapniss noh?
T'ree an eleven! Force dem awn!
Gal, how yuh fool-fool soh!
    Pare up yuh eel an ben yuh toe,
Mek me hole de boot fe yuh.
Poke een yuh foot-hard, harder! Mine
Yuh bus i ! Dat wi do.
    Tek time work up yuh toe dem now,
Ha patience, it wi gwan,
Look how i look sweet! Good ting me
Force yu fe force i awn!
    Se two lef foot brown boot yah, Kate,
Fe t'ree shillin an bit!
Come try dem awn gal. Dem gawn een?
Lawd wat a perfic fit!
    No numba eight, Jane? Buy a backless
Numba four, me chile,
Half een, half out, notten no wrong,
Me do dat all di while.
    Me wear a ten, dem doan got none,
But dat no badda me,
Cheapniss is bliss dese days, me dear
Me buy t'ree numba t'ree!
    Lawd, look a sweet brown an white pumps,
Mark four an twopence! Gran!
An hope a get even me big toe
Eana dis yah one.
    Me neba miss a boot-sale, chile
Me love dem, me kean lose.
Koo yuh, me bill mark twelve bob,
An me get four pair a shoes!

The African slaves who had to be satisfied with learning English from a fellow slave did not only learn it incompletely, but also influenced it by their native language. This blended language resulted in the emergence of JAMAICANISM, with a vocabulary peculiar to Jamaica and Jamaicans.

The spoken English in Jamaica can be arranged in a linguistic continuum, ranging from the talk of the uneducated peasant to the "front door" English of the educated, with the middle and upper middle class being bidialectuals.

Louise Bennett's (1957, p. 6) dialect verses express most of the characteristic features of Jamaicanism, as well as the subtle humour and buoyant spirit of Jamaicans. In "Shoes Sale" the following peculiar qualities of the language are portrayed:

1. <u>Word endings and pronunciations:</u>

   (a) Jamaicanism is characterised by the African way of pronouncing many words that are commonly used by the lower socio-economic group in the

country: yuh for your, fi - for, di - the, doan - don't, mek - make, i - it, awn - on, numba - number,

(b) The aspirate loses its sound in words like house, hurry, him, hungry, head, heel, but it gains prominence in hooman (woman), eel (heel), haxe (axe), humbrella (umbrella). Similarly, several words which retain the phoneme of the standard word, lose their initial or terminal sound and they appear like new words: t'ree - three, an - and, ben - bend, hole - hold, een - in, wi - with, lef - left, chile - child, dese - these, kean - can't, nebba - never, notten - nothing.

(c) It will be observed that the digraph "th," is absent from many words, e.g. wi - with, dese - these, dat - that, t'ree - three. In "tek," and "mek" the "a" is not pronounced.

2. Formation of plural forms:

(a) Nouns: In the African language use is made of "dem" after a noun to show the plural number. In "tek time work up yuh toe dem," toe (toes) was being pluralised.

(b) Pronoun: The pronouns "wi" (we) and "yuh" (you) are used in the plural for all cases, with "unu" being used for the plural "you" sometimes.

3. Verb forms: The "folk" verb forms do not seem to be similar to the standard English action words. In the standard English verb there is the first person singular number, the past tense and the past participle, but Jamaicanism has a singular form with a simple past tense usually expressed by such adverbs and adverbial phrases as "yesterday," "from time," "long time" or the use of "did." A look of strangeness is in the continuous tense which is expressed by the verbs "de," "da" or "da" (of African origin) or the use of the present participle with the auxiliary verb

omitted:

me a come (I am coming), de rain (de) fall
(a)

(rain is falling), Tom comin (Tom is coming).

4. Double Negative: The use of the double negative is more the rule than the exception in Jamaicanism. This is exemplified in "half een, half out, notten no wrong."

5. Interrogation: As the "folk" speech makes use of the interrogative pronouns the standard English word order is more or less mainatined, as in "Wa him say?" (What has he said?), "Is when you goin a town?" (When are you going to town?") "A wah him say?" (What has he said?).

6. Emphasis or shades of meaning in one's expression are shown by "iteration" as in, "Gal how yuh fool - fool soh?" or by the use of "well," or "kean done," as in "Yu well wrong" (You are very wrong,) "It long kean done" (It is very long).

From the above overview it will be observed that Jamaicanism is an amalgamation of many speech patterns - African, English, French, Spanish, Indian and American - each of which entered the speech of the whole linguistic continuum by several routes.

EVIDENCE OF INTERFERANCE

In 1962 the writer conducted a study "to determine the relative frequency and persistency of language and spelling errors of elementary school children in Jamaica." The material used for the study consisted of 43,093 scripts written by pupils in Grades 1-5 of 315 schools which varied in size and location within each Parish. The pupils were drawn from "English" speaking homes representing the middle and lower socio-economic levels, with the greater number from the lower level. Some of the errors of high frequency, classified according to the error-guide developed for the study, were:

1. Substandard English Expression:

   (a) I did want to invite you
   (b) When the mango them is ripe....

2. Double Negative:

   (a) I could not get no rest.
   (b) The boys don't want no gal to play with him.

3. Rule of Proximity:

   (a) The people did brought a man on a bed to see Jesus who was palsied.
   (b) The Governor General of the W.I. did visit Jamaica which did open the Trade Fair.

4. Misuse of Words:

   (a) Please get someone in my space.
   (b) I memba when the lightening did come.

5. Wrong use of Verbs:

   (a) Mi Mother tell me fi brush the yard.
   (b) The teacher neva learn we the song well.

6. Omission of Verb:

   (a) I born the 25th January.
   (b) A was coming to look for you but my mother sick.

7. Incorrect use of Pronoun:

   (a) Them is going to the beach.
   (b) The boys likes to play with themself.

8. Expressing the Past Tense:

   (a) I was glad to heard from you.
   (b) The mule drawn the cart all day yesterday.

9. Expressing Plural:

   (a) The girls them eat heaps and heaps of mango.
   (b) Him bright so him get nuff sum right.

10. Misusing the gender of Pronouns:

   (a) I did see the Queen and his chariot.
   (b) When me ask Mary to play with me him never answer.

Spelling Errors. Of the 249 words listed in the error guide, 148 are found in the Gates (1937) list, and 240 are included in the Rinsland Basic Vocabulary (1945) and about 12 words are peculiar to the Jamaican and West Indian vocabulary.

The types of spelling errors that occurred most frequently fell under:

(a) Phonetic Spelling: akcept - accept, ancious - anxious, deff - deaf, meny - many.

(b) Omission/Addition of letters: butifull - beautiful, asfalt - asphalt, comming - coming.

(c) Mispronunciation/Confusion of Sounds: Febuary - February, aready - already, possable - possible, picnick - picnic.

In Jamaica, the views expressed by British and American exponents of the teaching of English were swallowed hook and line without much thought as to their relevance to the local situation. The result was that the pupils' problems became worse, and the teaching-learning endeavour lacked direction and empathy. Studies of LaPage, Craig, and Grant challenged teachers to examine their teaching procedures, and to experiment with different methods of teaching standard English to a seemingly bilingual school population.

There are at present two schools of thought with experimental programmes in operation:

(1) The school which emphasises teaching English as a Second Language, making use of the pattern practice technique.

(2) The school which advocates the integrated Language

Arts approach with emphasis on providing pupils with <u>what</u> to say (by enriching their experience and vocabulary) then teaching them <u>how</u> to say the what in a universally acceptable manner.

Since the duty of the elementary school is to teach pupils the speaking and writing skills which will help them express themselves in an acceptable manner, the first problem which faces the teacher is that of selecting the items for teaching these skills. The current trend is to heed Sunne's (1923) advice, that schools survey the language usage and spelling errors of their pupils and use the findings as springboards for selecting those items that should be included in the language programme during the school year, and for stressing elements which have relevance to, and utility value in the living language of the community.

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Reactions to Mr. Grant's paper:

1. The problems of education in Jamaica sound very similar to those in our urban areas. Many large American cities also have untrained teachers and overcrowded classrooms to meet the needs of an economically deprived population which speaks a divergent dialect.

2. Mr. Grant's ideas regarding the instruction of children who speak a divergent dialect are similar in many respects to the underlying concepts of the language experience approach. He speaks, for example, of accepting a child's language and of promoting subsequent language growth through vocabulary - building experiences and through diagnostic teaching.

STANDARDIZED TESTS: USE AND MISUSE

Bruce W. Brigham

Johnny has a 6.1 reading grade score on a group standardized test. That means that his reading is at the level at which most sixth-graders read, at the end of their first month in sixth grade....doesn't it? Or, does it mean he can effectively and independently read the beginning parts of all the books in the sixth grade?....or, that he needs teacher guidance with sixth grade materials?

Does it mean any of these things? It might, but then again....? The 6.1 score may be an average (let's see, mean or median?) of a 7.1 vocabulary score and a 5.1 comprehension score. In other words, if Johnny had one hand in a pan of boiling water and the other hand in the freezer, he'd have an (arithmetic) average temperature! But as long as he has done something we can put a number on, we know all about him....or do we?

What is "Standard" About Standardized Tests?

There are several elements common to all standardized

tests, including basic purpose, general approaches to construction and pre-publication trials, administration requirements, plus limitations of application, meaning and interpretation.

Purpose and Rationale

One frequently stated purpose for standardized measures is that of "objectivity", the removal of teacher bias from evaluating performance. A laudable aim, but in many, if not most, educational situations-particularly at the secondary levels and below-misinformation and lack of information have been substituted for bias. Something has gone awry here somewhere; therefore, as Edgar Dale noted in the Ohio State News Letter, "We must get our ignorance organized."

The function of standardized tests is to reflect the range of performance of a defined characteristic possessed by a group of individuals. The degree to which an individual performs successfully on the items representing the characteristic to be measured, other things being equal, should

indicate how much of the characteristic he possesses, in comparison to the others of the sample group. The latter is a hopeful <u>assumption</u> underlying the use of these measures. The involved techniques of test construction are directed toward increasing the liklihood that this assumption will be true.

Here, then, we have several "standard" (common) elements: the definition of the behavior to be measured, the underlying assumption that quantifiable differentiation is possible, plus the possession of the population of certain other characteristics in common.

Actually, what group paper-and-pencil standardized tests "measure" of an individual is simply his ability to obtain a particular score at a particular time in a particular activity, in comparison to those scores of the individuals in the standardization group.

<u>That is all</u>.

At every stage-construction and development, standardization, administration, scoring and interpretation-are

explicit and implicit assumptions which are subjective in nature. It is more effective (and accurate) to consider standardized tests as organized attempts at controlled subjectivity, than as truly objective.

EXAMPLE I: George, 14 years old, 6th grade. Stanford Achievement Test: Total reading-8.4 grade. However, George was a complete non-reader. He simply made patterns of the answer choices.

Major Elements in Test Construction

Construction and Trials

Items that logically seem to represent aspects of the characteristic are developed by certain methods that are likely to result in their successfully discriminating between those individuals with much and those with little of the characteristic. Frequently items are borrowed or adapted from other measures where they have appeared to discriminate on the basis of the same or a similar characteristic.

The set of items is then tried out on one or more samples of the population for whom the test is designed. The set of items and the individual items are analyzed to determine

if they do discriminate successfully, preferably on the basis of some different and more operational measure or criterion of the characteristic. The items that discriminate best are retained.

The samples on whom the items are standardized hopefully should represent a balanced cross-section of descriptive characteristics of the entire population for whom the test is designed. This may be accomplished by various methods, the best probably being stratified random samples. Taking into consideration each potentially influencing characteristic of the population, in relative proportion, while randomizing the possibility of any of its members being chosen, is quite time-consuming, but there are techniques for doing this to meet the basic statistical assumptions involved in standardization procedures. These criteria in practice are very rarely met, especially in the case of group paper-and-pencil tests, various shortcuts being employed instead. Result: particularly at junior high levels and below, truly "national" norms are largely of the stuff dreams are made of. Even if

"national" norms are available, if they are 12-15-20 years old, how comparable are they to today's population?

The measure is evaluated in terms of <u>reliability</u>, which can mean several things. Basically the concept concerns the extent to which individuals in a specified sample, over a period of time, with no indication of intervening differential influences, retain their relative rank in the group in terms of the test. In other words, do the items and the test <u>consistently</u> indicate the same rankings of the individuals, over a period of time, for the characteristic, or were the initial results largely from chance or uncontrolled factors? Consistency of rankings over time is the best approach to reliability; it is also the most expensive and difficult to utilize-and, unfortunately, the <u>least</u> used.

Most widely used measures of reliability are those of "internal" consistency, i.e., do half the set of items discriminate (with the same group at the same time) approximately as well as the other half? There are various techniques

for determining this. Regardless of the details, those measures are the least expensive, easiest and most widely used. The resultant coefficients of reliability tend to be much higher than those obtained by the first method noted. It is this kind of reliability that is most often reported by test publishers. However, there are serious questions as to the value and dependability of this kind of reliability which, in any case, is not the same thing as the original meaning noted above.

For a test to be valid, it should measure what it is supposed to measure. (To be valid, it has to be reliable, but it can be reliable without being valid.) This is the usual meaning of validity, although technically at least four variations have been developed. This is also a very difficult test factor to fulfill in actuality. Items and tests do not necessarily successfully measure a particular characteristic by logical definition, description or labels. The most meaningful concept of validity requires an entirely independent measure, preferably discretely and empirically

quantifiable. With this concept of validity, we face the greatest difficulty in practice-and it is least used.

EXAMPLE II: There are group standardized achievement measures where:

a. If the paper is dated, a reading-grade score of 1.6 is obtained;

b. If all the first answer choices are marked, a reading score of 3.1 is received;

c. If all the final answer choices are marked, a reading score of 3.6 is found.

Administration and Application

Administration procedures are usually very specifically standardized, as they should be. This necessitates, however, that each and every administrative procedure be handled exactly as specified. Every time a change is made, the already limited interpretive value and meaning of the results is reduced drastically.

Use should be confined strictly to groups having the same descriptive characteristics (age, sex, etc.) of the population samples used to establish the norms of the test (if you can obtain complete descriptive data of the original samples.) Again, any significant variation in this factor and the scores are meaningless in relation to the original sample population.

However, local norms can be built over a period of time. Actually, considering the limitations noted previously, using local experience as the basis for comparison of current scores is probably the most worth-while approach, providing the local population remains relatively stable.

Meaning and Interpretaion

The branch of psychology most concerned with developing standardized tests is the field of Individual Differences. Oddly enough, the field has been concerned largely with the development of group measures, which are much more widely used than are individual standardized tests (the latter includes the Binet and the Wechsler intelligence tests).

As a result, most of our commonly-used standardized measures in the school situation are most effective as indicators of group characteristics. For these and other reasons, an individual grade or age "score" of a group standardized paper-and-pencil test has a very limited meaning. The comforting and pseudo-concreteness of the numbers and mathematics associated with standardized tests (which also make them appear impressively confusing) can be very misleading. The basic problem seems to center around the fact that the limited meanings of scores are neglected in favor of stressing an abstract number value. Let us consider this idea in relation to both individual and group measures.

Individual. A carefully standardized test such as the Wechsler intelligence test which involved thorough controls at each construction stage, and requires special training for administration and interpretation, results in a score, with a good examiner, that is considered to be within plus or minus 5 (five!) points of the hypothetical "true" score approximately 2/3 (two-thirds!) of the time. One-third of

the time any individual score will probably be greater than plus or minus 5 points away from the "true" score. These are the statistical limits for the confidence we can put into such scores, based on the relatively stringent way they have been developed.

For example, Tom and Jane both recently obtained a Full Scale I.Q. score of 100 (average) on the Wechsler Intelligence Scale for Children. Is their "intelligence" (ability to learn) the same? What are some of the possibilities?

1. Tom's usual FS I.Q. score may be 96, while Jane's is 104.
2. Tom's 100 could be the result of depressed functioning; his potential capacity, with the removal of the interfering factors, could be in the superior range (120-129). Jane's 100, on the other hand, may represent the best she can possibly do.
3. Their Full Scale I.Q. scores may have resulted from partial socres somewhat like these:

   Tom: Verbal-90, Performance - 110; FS=100

   Jane: Verbal-110, Performance - 90; FS=100

Even with the relatively rigorously developed, administered and interpreted <u>individual</u> standardized tests, can we be confident that 2 or more similar scores represent exactly the same learning capacity? Is there actually any invariable reason to expect Tom and Jane to respond in exactly the same manner in various instructional situations ....or even in a roughly similar way in a reading situation and a science experiment?

<u>Group</u>. With group standardized measures, much greater limitations of development procedures indicate that individual scores be considered much more cautiously.

Consider:

1. An individual score on a paper-and-pencil group standardized intelligence test, with many shortcuts, qualifications and approximations involved in the ways in which they are interpreted, can usually be considered to be within plus or minus 15 to 30 points of the hypothetical "true" score 2/3 of the time.

2. Group paper-and-pencil measures of intelligence and reading tend to cover basically similar factors of intelligence, general verbal abilities and reading achievement. Students with reading problems frequently have depressed "intelligence" scores because of their reading difficulties.

   a. Approximately 2/3 of dozens of youngsters previously labelled "orthogenic backward" or mentally retarded on the basis of group tests, when thoroughly evaluated individually in an educational-psychological clinic, were found to have <u>average or better</u> overall intelligence, potentially.

   b. Surveys indicate that about <u>80%</u> of retarded readers (retarded in terms of their capacity) have average or better intelligence.

3. An individual score in a group test of reading tends to be 1 to 4 levels <u>above</u> where the individual can usually profit from systematic instruction (at his frustration level, not his instructional level.)

Reasons include:

a. Test development limitations

b. Limited sampling of skills

c. Partial control of guessing

d. Situation factors

4. Jack 16, 10th grade.

Iowa Advanced Reading: Total Score: 5.9 grade level. Therefore, he was assigned 5th and 6th level materials. But, on comprehensive individual "informal" tests:

Word Recognition

	Flash Scores	Untimed Scores
Pre-primer	90%	96%
Primer	70%	90%
First Reader	24%	40%
Second Reader	4%	20%

Individual Informal Reading Inventory

Pedagogical Level	Reader Level
Independent	0
Immediate Instructional	Reading Readiness
Basic Instructional	Pre-primer
Frustration	Primer
Hearing Capacity	First Reader

5. Generally, there is no basis for comparing scores from different tests on the same individual: usually different standardization procedures involving different populations at different times and places are involved - it is analogous to comparing bowling balls and meteorites - what do you have?

Can we still believe Johnny's 6.1 reading level on that test tells us all we need to know about his reading? No, but there are some ways in which such scores may be useful.

Some Uses for Group Standardized Measures

1. As screening devices for separating probably very high, average and very low potential achievers, for initial tentative grouping. Provisionally beginning instruction

should be about two levels <u>below</u> the test scores obtained.

2. As a rough measure to compare relative achievement of individuals who may need careful individual study, for example:

   a. Those with very high test scores, but average or poor daily achievement.

   b. Those with average or poor test scores, but very good to excellent overall general achievement.

   c. Those with low to average scores whose oral verbal participation is superior, but whose reading and writing achievement is very low.

3. To establish local norms on specific tests for a local population.

<u>Summary and Conclusions</u>

First, let us admit that with standardized group test scores we are talking about approximate abstractions umpteem times removed from the reality we think is being described.

Second, we should avoid "pigeonholing" individual youngsters by their scores on such tests.

Third, we should learn something about test construction and study the test manuals in order to better understand the uses and limitations of these measures.

Fourth, we need to demand adequate information of construction and standardization data until those supplying us with tests supply such information with them. In the long run, this will increase the liklihood of more dependable measures being built.

The most effective standard with standardized tests is a great deal of caution.

Reactions to Dr. Brigham's paper:

There was general agreement that caution is necessary in evaluating the results of standardized tests. Technical aspects of Dr. Brigham's paper were neither challenged nor extended.

CLOZE PROCEDURE AS A PREDICTOR OF COMPREHENSION IN SECONDARY SOCIAL STUDIES MATERIAL

James Geyer

INTRODUCTION

The investigation upon which this presentation is based involved the following problems:

1. The major problem investigated how predictive of a student's ability to comprehend social studies materials are cloze procedure scores when compared with I.Q. scores, previous social studies grades, and standardized reading test scores.
2. The secondary investigation dealt with the problem, does rewritten social studies materials on an easier readability level improve the comprehension of that material?

Development of Readabilit / Measures

Interest in assessing printed materials has existed for some time. Lorge (1944, p. 544) i· .cates that the Talmudists in A.D. 900 counted words in a usual or unusual sense. One of the first scientifically oriented attempts to quantify a readability factor occurred in 1889 when F. W. Kaeding attempted to ascertain the frequency of occurrance of 11,000,000 words. The importance of the above study along with Thorndike's investigation (1921) or word frequency is suggested by the initial inclusion of vocabulary factors alone in the Lively and Pressey readability formula. (1923, pp. 92-95) This formula is credited by Chall (1958, p. 17) as being the first quantitative study of readability.

By 1928 the emphasis on vocabulary factors as the basis of predicting readability was recognized as being inadequate. During the second period of readability exploration, extending through 1939, investigators of readability searched for factors other than vocabulary which would

provide more accuracy in prediction. Representative of this period is the work of Gray and Leary (1935). In studying previous findings in readability and securing the opinions of about 100 experts and 170 library patrons, Gray and Leary found 389 factors which were assigned to the categories of content, style of expression and presentation, format, and general features of organization.

Difficulties in evaluating qualitative factors and the interrelatedness of many of the variables investigated by Gray and Leary were instrumental in ushering in the next period of readability investigation. During this period, which began about 1939 with the appearance of the Lorge Readability formula (1944, pp. 404-19), the basis for development of readability formulas rested on the premise that a small number of factors could validly predict readability. The two-factor Flesch and Dale-Chall formulas were credited by Chall (1958, p. 156) with giving a readability prediction comparable to the five-factor Gray and Leary formula.

Limitations of Readability Formulas

In the process of objectifying and simplifying the application of readability formulas, a measure of vocabulary and sentence factors was usually included. A source of criticism of these formulas lies in their avoidance of measuring other factors of readability.

Lorge (1949, pp. 90-91) indicates that readability formulas measure four elements. They are vocabulary load, sentence structure, idea density, and human interest. He adds that no other internal elements of comprehensibility have been useful in predicting passage difficulty although the lack of a measurement of conceptual difficulties and organization of the printed material is a fundamental weakness of formulas.

Chall (1958, pp.31-32) adds reinforcement to the above statement. She suggests that readability formulas do not measure abstractness, vagueness, illogical organization, difficulty of words, conceptual difficulty, content, and physical features.

Smith and Dechant (1954, p. 251) support the above statements while attending to certain variables not previously mentioned. They state that readability formulas pay little attention to six factors which are determinants of readability. These factors are density and unusualness of facts, number of pictoral illustrations, interest and purpose, concept load and abstractness of words, organization of material and format, and interrelationship of ideas.

Dale and Chall (1949, p.23) suggest that three variables affect readability. Included are the printed material and its stylistic elements, the criterion measure and the method used to make the readability estimate, and the reader along with all the qualities he brings to the printed page.

In summary, a limitation of the readability formulas appears to be evident with consideration of the variables mentioned above by Dale and Chall as only two of these factors are quantified. Since individual capabilities and characteristics are not considered in application of readability formulas for evaluation of written materials,

difficulties may be encountered when one attempts to equate the reader and instructional material on the basis of such quantification. The discussion below expands and supports this statement.

Readability Formula Application and Effect on Comprehension

The statements above note certain limitations which are associated with quantitative evaluations of printed materials. Results of empirical assessments of readability formula procedures are presented below.

Since one of the elements common to the most widely used readability formulas is some measurement of vocabulary, this variable would logically be included in investigations of readability assessment. Nolte (1937, pp. 119-24; 46) investigated the effects of comprehension on mechanically simplifying vocabulary terms. Pictoral tests and personal interviews were employed to measure comprehension. Nolte reported, "Many vocabulary difficulties and numerous erroneous concepts were disclosed...."

Wilson's study (1948, pp.5-8) included a three-hundred word passage which was amplified into six-hundred and twelve-hundred word versions. Since students comprehended the longest and structurally most difficult version significantly better, the efficacy of simplifying sentence factors as a means of improving comprehension may be open to question.

McCracken (1959, pp. 277-78) investigated the effectiveness of applying readability formula criteria in producing more readable materials. He rated the difficulty of two passages by the Yoakam and Dale-Chall formulas. By adjusting the vocabulary load, the readability levels were interchanged. Multiple-choce results based on factual comprehension led McCracken to conclude that

> Selections written to confirm with a set of vocabulary standards in order to increase or decrease their readability actually may not increase or decrease their readability as much as indicated. A selection thus written would seem to have a contrived or artificial readability level.

As a secondary purpose, the present study investigated the effectiveness of rewritten social studies materials as a means of improving comprehension. Two social studies texts

were included in the study. These texts contained identical topics and visual aids such as pictures and maps, however, the readability levels were different as determined by application of the Dale-Chall Readability formula. The easier text was rated at a fifth-sixth grade level in readability while the more difficult text was placed at the seventh-eighth grade level. A single, multiple-choice test was constructed to measure knowledge acquired after reading a randomly selected chapter. Analysis of covariance was applied to factor out the effects of reading achievement levels, I.Q., and previous social studies grades. The null hypothesis of no significant differences between adjusted means was not rejected.

It is not the intent of this paper to suggest that readability formulas have no validity in adjusting readability levels. However, the above findings indicate that attempting to provide more readable materials by reducing sentence and vocabulary factors may not benefit the students for whom it is intended.

The Cloze Procedure

In 1953 Wilson Taylor (1953, pp. 415-33) initiated a completion system which he termed the cloze procedure. This system is defined as being a method of intercepting a message (written or spoken), mutilating it by deleting parts, and then administering it to receivers (readers or listeners). The degree of success in restoring the missing elements is indicative of the individual's capacity and/or ability to deal with that message. This interaction between the reader and the printed material appears to circumvent certain limitations of readability formulas. Taylor (1953) suggests that the cloze procedure seems to measure the effects of many elements of reading by involving the reader with the material to be read.

Validity and Reliability of the Cloze Procedure

Many studies have confirmed the validity of the cloze procedure as a measure of readability. In his initial experiment, Taylor (1953, p. 431) finds that several reading

passages were ranked in the same order by the Dale-Chall Readability formula, the Flesch Readability formula, and the cloze procedure. Rankin (1958, p. 138) reports correlations between standardized reading test scores and cloze test scores ranging from .65 to .81.

A number of studies relate reliability findings for the cloze procedure in pre- and post-test scores. Taylor (1957, p.23) states that such correlations for three cloze forms employed in his investigation ranged from .80 to .88. Coleman and Miller (1968, pp. 369-86) find a correlation of .93 between pre- and post-test scores. Hence, the above findings appear to confirm reliability and validity of the cloze procedure as a measure of readability.

Cloze as a Predictor of Comprehension

As a rationale for this study which investigated the effectiveness of the cloze procedure as a predictor of ability to comprehend social studies materials, two studies appeared to be pertinent. Bormuth (1967, p. 295) established a frame of reference between cloze test scores and equivalent

comprehension scores. Hafner (1964, pp. 135-45) investigated the effectiveness of the cloze procedure as a predictor of course grades in a college methods class with a resultant correlation of .65 being reported. These data suggest that the degree of comprehensibility an individual finds in instructional material may be predicted by pre-reading cloze scores.

Procedure and Findings

Data were obtained for this study by the following procedure. Students first completed a pre-reading cloze test from one of the two texts utilized in the study. An every fifth-word deletion system was employed. After completion of the cloze test, the student read the chapter from which the cloze test had been constructed and completed a fifty-item multiple-choice test.

To test the hypothesis concerning the predictive effectiveness of the cloze procedure as compared to the predictive effectiveness of standardized reading test scores, I.Q. scores, and previous social studies grades as predictors

of how well students comprehend social studies materials, significant differences between two correlation coefficients involving a common variable were investigated with application of a procedure described by Tate (1965, pp. 282-83). At the .01 level the cloze procedure was not found to be significantly better than other variables in predicting comprehension levels. In reference to the standardized reading test scores, the findings were in the opposite direction of the prediction. At the .05 level, however, cloze scores were found to be significantly better predictors of comprehension of the social studies material as measured in this study than I.Q. scores and previous social studies grades.

Discussion

A difference in the opposite direction of the prediction was found in comparing the effectiveness of prediction of cloze and standardized reading test scores. This result might be attributable to the similarity of the kinds of questions, i.e., multiple-choice items in the criterion measure and the standardized reading test. Completion of the cloze

test may have required a different, more subjective type of comprehension ability than did the standardized reading test.

The efficacy of rewritten social studies materials on a lower readability level as a means of improving comprehensibility of such material was investigated. Reinforcement was given to certain previous studies in that objectively reducing vocabulary difficulty and sentence complexity may not significantly improve comprehension scores.

Continued investigation of the cloze procedure as a predictor of comprehension appears to be warranted. Numerous studies indicate that the cloze procedure is a valid and reliable measure of readability. The significant differences at the .05 level in comparing the predictive effectiveness of cloze scores to I.Q. scores and previous social studies grades also support the above suggestion.

Bormuth's frame of reference was mentioned previously. The findings of this study suggest that a universal frame of reference may not be feasible.

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Reactions to Dr. Geyer's paper:

1. The attempt by CLOZE to match reading material with students is worthy of continued investigation. This procedure does circumvent a real limitation of measures of readability by assessing what the reader brings to the page.

2. CLOZE is a more valuable testing instrument than the traditional read-and-test procedure because it eliminates the variability of teacher competence in evaluating questions and answers.

3. CLOZE provides a good estimate of readability and predictability for primary grade to college age students.

4. Readability formulas which are based upon the number of syllables in a passage do not really indicate the concept load of the passage. Difficult concepts can be expressed using words of few syllables.

A PSYCHOLINGUISTIC LOOK AT READING DEFINITIONS AND DIRECTIONS

MaryAnne Hall

What is reading? Emphasis on this question in reading methods texts and in reading courses has hopefully stimulated prospective and inservice teachers to think about the process which receives so much instructional time in our schools. Reading authorities have long stressed the need for understanding the reading process since the definition of reading can affect the relative emphasis given to the decoding and meaning dimensions of reading in instructional settings. The purpose of this paper is to present and analyze linguistic views of reading and to state implications of these definitions for the teaching of reading. The position of this paper is that psycholinguistic study does offer valuable insights for the teacher of reading. Since reading is a language-based process, a lingusitic perspective should clarify what occurs when a reader engages in the act of reading.

Psycholinguistics draws upon knowledge from both psychology and linguistics, and as psycholinguistics is applied to reading, it is concerned with the interrelationship of thought and language. Psycholinguistic study probes how an individual learns language, especially his native language, and how he uses the symbol system in thinking and communication. Linguists analyze the features of a language, and this linguistic information combined with the behavior involved in learning and thinking is useful in analyzing the reading process as an interaction between the reader and written language. How encouraging it is to realize that linguistics applied to reading offers much more than concentration on decoding of print through knowledge of phoneme-grapheme relationships!

Linguistic Definitions of Reading

The following are statements of linguists who have looked or are looking at the application of linguistic knowledge to reading. For this paper, the definitions from reading authorities are not included but one will certainly

want to compare the linguistic definitions with the ones stated in the literature on reading.

According to Miller, "Reading is the interpretation of writing, just as listening.. is the interpretation of speech." All reading, writing, listening, and speech are based on the structure of a language. In reading, a child learns the writing system. Miller calls definitions such as "getting meaning from the printed page" ridiculous and explains that this is a result of reading but not a definition. (1969, pp. 42-43). In all the linguistic definitions of reading, stress on the relationship between spoken and written language is a common element.

Leonard Bloomfield who is credited with creating the first linguistic stir in the reading field maintained that, "To understand reading one must understand the relation of written (or printed) words to speech." (1961, p.19). He believed that especially for beginning readers major emphasis should be on how speech is recorded by written symbols. His reading materials, however, stressed small units of print,

and modern linguists would argue that a linguistic view of language must consider larger units than did Bloomfield.

Another definition is offered by Fries in this statement:

> The reading process then is by no means a simple process although it can be summed up in one simple statement.
>
> One can 'read' insofar as he can respond to the language signals represented by patterns of graphic shapes as fully as he learned to respond to the same language signals of his code represented by patterns of auditory shapes. (1962, p. 131).

He identifies three stages of reading. The first stage is the transfer stage when a child learns to transfer from the auditory signs for language signals to a set of visual signs for the same signals. In the second stage responses to the visual patterns become so automatic that the graphic shapes do not receive conscious attention as the reader supplies portions of the signals not fully in the material itself. The third stage begins when reading is so automatic that reading is used equally with or more than live language in acquiring and developing experience. Fries

has written a set of "linguistic readers" designed for the transfer stage, and these books stress presentation of graphic shapes in terms of regular spelling patterns. While his definition does stress the relationship between the spoken and written codes, one can quarrel with the unit of response which is not the meaning-bearing unit but a smaller one of single words and smaller graphemic units within words.

In contrast with Bloomfield and Fries, Lefevre claims that the sentence is the minimal unit of meaning. His definition states that reading requires "recognition of graphic counterparts of entire spoken utterances, comprehended as unitary meaning-bearing patterns." (1964, p. 39). An implication for beginning reading can be found in the following comment:

> The essence of reading and writing readiness is the child's understanding that the language he hears and speaks can be represented graphically in writing and print; and that the writing and print he sees can say something to him. (1964, p. 39).

Two other statements of Lefevre which refer to comprehension are:

> "Reading is not reading unless it gives access to meanings." (1969, p. 291).

"Entire meaning-bearing patterns must be not simply decoded but interpreted and evaluated." (1969, p. 293).

Another definition of reading can be found in the title of an article, "Reading: A Psycholinguistic Guessing Game," by Goodman who has written extensively about the function of language patterns in cuing or miscuing the reader. (1965, 1967, 1968, 1969). He has also developed an elaborate model of the reading process, and explains how the process changes at different stages of reading development. (1968). For the beginning reader, oral and silent reading are probably very similar processes as the reader changes or recodes the print to aural input which is then recoded into familiar oral language which is decoded and associated with meaning. At later stages, the recoding and decoding are simultaneous so that the reader decodes in meaninful units directly from the print. (1968). Further elaboration by Goodman follows:

> Reading is the receptive phase of written communication. In written language a message has been encoded by the writer in graphic symbols spatially distributed on the page. The reader does not merely pass his eyes over written language and receive and

> record a stream of visual perceptual images. He must actively bring to bear his knowledge of language, his past experience, his conceptual attainments on the processing of language information encoded in the form of graphic symbols in order to decode the written language. Reading must therefore be regarded as an interaction between the reader and written language through which the reader attempts to reconstruct a message from the writer. (1968, p. 15).

He claims that we must dispense with our preoccupation with letters and words and begin to look at language. "Nothing less than decoding of large language units is reading." (1968, p. 16). "...no theory of reading, reading learning, or reading instruction can be complete or successful which excludes any aspect of this psycholinguistic process." ..."Reading is not reading unless there is some degree of comprehension." (1968, p. 26).

The following comments of Carroll seem similar to those of Goodman.

> ...thought and congnition are presupposed by language --that speech is a consequence of some kind of thought or cognition, even though language structure may channel or influence thought.

> "We can define reading, ultimately, as the activity of reconstructing (overtly or covertly) a reasonable spoken message from a printed text, and making meaningful responses to the reconstructed message that would parallel those that would be made to the spoken message (1964, p. 62).

A recent book by Wardhaugh offers a concise definition: "When a person reads, he is processing information." (1969, p. 52). Wardhaugh equates the act of processing information with comprehension. He explains:

> Comprehension requires far more than understanding the meanings of individual words and then fusing these meanings by some mysterious process so that sense will result. It is this process, this fusion itself, that requires a close examination. It has syntactic and semantic components about which the linguist can provide important information. (1969, p. 66).

Linguistic Directions for Reading Instruction

What direction for the teaching of reading can be found in the preceding definitions of reading and in the study of psycholinguistics? Generally, "linguistic"

programs for reading have been based on the alphabetic principle of our language, and consequently, educators have been disappointed in linguistic applications to reading. Also, linguists have been dismayed by the limited application of linguistics to reading. Wardhaugh claims,

> It would be true to say that most reading experts have given only token recognition to linguistics in their work, with the consequence that the vast part of what is discussed under the name of linguistics in texts, methods, and courses on reading is in reality very far from the best linguistic knowledge that is available today. (1969, p. 30).

In a speech at the 1968 International Reading Association conference, Goodman states,

> Linguistics is not something to believe in or not believe in. It makes about as much sense for a reading teacher to reject linguistics as it does for an engineer to reject physics. Engineering is to a great degree applied physics and similarly, reading instruction is applied linguistics. (1969, p. 271).

My position that psycholinguistic study has much to offer to the teacher of reading is based on the following premises:

1. Every reader including the beginner in grade one is a user of language. The greatest resource the child brings

to the task of reading is his language and experience background. In discussions of reading readiness great attention has been given to the experience background; less to the language background. When attention has been given to the language background, focus has been on extent of vocabulary and general ability to express ideas orally. Linguists would give great attention to the structure of the spoken language of the beginning reader as it relates to the written language he must process while reading. Beginning reading materials should reflect the oral language structure of the readers for whom they are intended.

2. The teaching of reading must be taught so that the reader is consciously aware that printed symbols relate to speech which he already understands. From personal examination of psycholinguistic explanations of reading, I am more firmly convinced than ever that the language experience approach is the most logical, personally relevant, and theorectically justified way of introducing children to reading. In this approach children are reading language--

their language--and they can realize the relationship of speech and reading as they use both the spoken and written codes of the language. Goodman's explanation of the "recoding" stage in which a child vocalizes to make the content resemble oral language can help us understand the task of the beginning reader in relating print to speech. (1968).

3. Reading instruction must consider the language and information processing the reader must do in order to receive a message from print. This language processing requires more than word recognition and application of phoneme-grapheme patterns to decode unfamiliar words. The processing of information definitions of reading need expansion and investigation so that in teaching reading we can develop children's ability to process information. Studies of the relationship between language and thought should clarify the comprehension process.

If, as Bormouth states, comprehension is a response to the language system, then the components of comprehension must be examined in relation to language processing skills.

(1969). In the beginning stages of reading, children rarely encounter new information as they relate print to familiar oral language. However, at later stages, children must process written language containing new content. Hopefully, linguists will provide communication models which relate the comprehension process to language.

4. When a child's spoken language is different from the language of the standard English in reading materials, his teachers need to know the essential differences in order to understand the translation process required by the non-standard English speaking learner. Teachers will need to know the features of non-standard language which may cue a reader incorrectly in standard English. Baratz has identified the syntactical features for the black inner-city non-standard speech. (1969).

5. Information regarding the ways language structure affects reading can be gained by studying the actual performance of children as they read orally. Goodman has developed a taxonomy of reading errors (miscues) which relates error

types to the study of language structure. (1969). The common use of oral reading tests is for diagnosis to determine instructional levels. When these tests are examined for error patterns, they are examined according to errors in word attack and vocabulary. These errors are classified as substitutions, mispronunciations, repetitions, hesitations, and refusals without examination of language factors in the material which may have caused the reader to err.

6. Linguistics is a scientific discipline which is a source of information. The educator and the reading teacher who are charged with application of linguistic knowledge to teaching reading need to draw upon the knowledge offered by linguists. Educators must be active in seeking linguistic information, and must develop instructional strategies utilizing appropriate linguistic information.

Summary

This paper has dealt with explanations of the reading process with a linguistic emphasis. Linguistic study

of dialects, of the regularity of patterns in phoneme-grapheme relationships, of syntactical structures, of language development, and of strategies of thinking which depend upon manipulation of language can not be ignored by educators.

The basic consideration is how the application of psycholinguistic knowledge can bring about improvement in reading instruction. The language of the reader is the base upon which reading instruction must be built. The former misconception of equating linguistics with a method of teaching reading resulted in a narrow and shallow application of linguistics to reading. Linguistic knowledge and research should lead to improvements, not just changes, in reading instruction, in teacher education, and in the development of reading materials.

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Reactions to Dr. Hall's paper:

1. The reading materials produced by linguists thus far have been of poor quality. For example, Bloomfield's Linguistic Approach to reading precluded the introduction of interesting reading material. This aspect of his approach is a violation of educational psychology. Hopefully, the current concern of linguists for large meaning-bearing units of language will eventuate in more soundly conceived instructional materials.

2. Goodman's findings in psycholinguistics cast doubt upon the value of our whole testing system in oral and silent reading. Perhaps the diagnosis of reading problems could be improved by an examination of the language patterns which a child brings to the printed page. If the examiner were to compare the child's language with the language patterns created by his oral reading errors, then more helpful diagnostic information might be the result.

QUESTIONING FOR THINKING: A TEACHING STRATEGY THAT MAKES A DIFFERENCE FOR DISADVANTAGED LEARNERS

Walter Gantt

The nature of citizen dissatisfaction with the schools and their curriculum offerings is evident in current reports. One newspaper (Afro-American, 1969) quotes a parent who said that children need to understand "the processes of thinking and feeling"; Cronin and Crocker (1969) tell about a group of parents who demanded that the principal be transferred because, under him, student reading achievement had not improved. In view of the resistance to rising school budgets, these criticisms must be faced if public support is to be continued. At the least, practices and achievements in schools, as in any other large business enterprise, will be subjected to intensified surveillance. More and more is the demand being heard that the institution be held responsible for the nature of its product--in this instance, the child.

This ultimatum is not a one-way challenge: teachers, too, share the alarm over the number of poorly educated youths who leave school each year unable to express their thoughts adequately or to make responsible judgment. Many have tended to view the language of the printed text as that of an alien domain. These youngsters, disadvantaged within the traditional school setting, are potential power kegs. The increase in their numbers is reflected in the growing volume of calls to security, administrative, and curriculum workers for help as well as in the requests for transfers to more responsive teaching situations.

However, the situation can be approached with an attitude of hopefulness. There is a growing body of data (Gantt, 1969) to support the notion that within the pupil's classroom verbal discourse cues may be identified by the teacher to which he may respond. Studies have been made of teaching techniques which make a difference in learning (Taba and Elzey, 1964). It is time to join the ranks of those few institutions who are giving the study of such strategies a significant place in their curriculums.

Pupil Thinking and Teacher Questioning

In general, educators subscribe to the dictum that teaching for thinking is a primary function of the school. Less concurrence exists about what teaching for thinking implies in teacher behavior and pupil acts. For the purposes of this presentation thinking is concerned with those specific tasks, discussed by Crutchfield (1969), of formulating problems, processing information and generating and evaluating ideas.

There is wide agreement that teacher questions are the means of triggering the pupil replies which evidence thinking behavior. There is also prevalent in the literature the idea that certain classes of questions elicit specific kinds of pupil reactions. Sanders (1966), however, calls this latter belief fallacious. It will be demonstrated that frequently, depending upon the readiness of the child, a long drawn out process of pupil-teacher activity must precede the appearance of thoughtful pupil behavior. In its fostering of group oriented strategies, the school has often neglected the child who required a more individualized approach.

Obviously the teacher's repertoire of techniques must include multiple strategies involving questioning. Also, planned strategies of instruction must begin with an identification of the kind of thinking behavior desired at a particular time. The clarity with which the teacher envisages the ends of instruction will have considerable effect upon the strategies he devises for their attainment and the extent to which he guides the efforts of the pupils in the desired direction.

As stated by Dewey (1910)". . . the origin of thinking is some perplexity, confusion, or doubt. Thinking is not a case of spontaneious combusion; it does not occur just on 'general principles'. There is something specific which occasions and evokes it." Teacher questioning is one means of evoking this response. The intent of this article is to meet an expressed need for specific guidance in questioning techniques for teachers which can achieve the desired results (Crump, 1970).

Classroom Strategies

Several questions arose in the process of formulating a plan to observe the development of thinking within the foregoing conceptual framework:

1. What verbal cues are emitted by children to show that they need help with thinking?
2. What kinds of teacher questions facilitate children's thinking?

Typescripts of reading lessons in several first grade classes in an urban inner city school supply examples of both the children's cues and the teachers' questions. The first grade was chosen intentionally so as to demonstrate that:

1. Deliberate instruction in teaching thinking may be started during the beginning of the child's school life.
2. Illustrations and personal data can be used to extend the limited verbal resources of the printed text at that level.

3. Teaching strategies responsive to the child can result in a noticeable improvement in thinking.
4. The term "disadvantaged" is pertinent primarily in those situations in which teaching strategies are inadequate, inappropriate, or unresponsive in their application to the individual pupil.

The units of analysis, or probes, which follow begin with a pupil utterance which provides cues to his thinking. The exchange between the teacher and that pupil is continued until the final pupil utterance shows a trend toward improvement or lack of improvement over the initial one.

1. (Class is asked about the number of family members in their story located in the Betts and Welch Primer, 1958.)

   Students: Four. Five. Four.

   Teacher: Why did you say five, Jim?

   Jim: I don't know.

   Teacher: (Refers Jim to illustration) How many do you see in the family, Jim?

   Jim: Four. I was counting the dog, too.

Analysis: The teacher is attracted to Jim because there is an apparent discrepancy in his statement which is not supported by known facts. An initial probe shows an uncertainty which is resolved when the teacher changes his question to enable Jim to compare his perception of the situation with the actual context. Jim progresses beyond his unsupported response to an explanation.

2. (Pupil is asked to contrast two pictures in order to make inference about why Father is confused during a game. She reports on the content of the second picture only.)

   Martha: Because the father is not peeking and the mother is holding up a bone and Jimmy are holding up a doll.

   Teacher: What have they done, Martha, to have fun with Father?

   Martha: They . . . . . (long pause)

Teacher: Who has the doll in the picture on page 6 when Father puts on his blind-fold?

Martha: Sue

Teacher: Who has the doll in the picture on page 7?

Martha: Jimmy.

Teacher: What have they done so they can have fun with Father?

Martha: They changed it around.

Analysis: Pupil shows an incomplete response to the task set by the teacher. Teacher reduces the required activity to its components and asks questions related to each part in order to assist the child in the analytical function. Following this procedure the teacher reiterates the initial question and the child then has sufficient resources to draw conclusions on his own.

3. (Teacher asks pupil why did he think Father was surprised when he removed his blindfold).

Roger: (No Response)

Teacher: Roger, have you ever been surprised by something?

Roger: Yes

Teacher: What happened when you were surprised?

Roger: I was happy.

Teacher: Did you see something you didn't expect to see which surprised you or did you get something you didn't expect to get that surprised you?

Roger: Yes

Teacher: What was it? Do you remember?

Roger: Yes

Teacher: Were you surprised on Christmas?

Roger: Yes. A bike.

Teacher: Why were you surprised?

Roger: Because I didn't expect to see it.

Teacher: Good. Why was Father surprised, then?

Roger: Because he did not expect to see the bone (in Mother's hand).

Teacher: What had happened to all the things he had seen before?

Roger: Changed

Analysis: Pupil does not respond to teacher's question. Teacher attempts to determine if difficulty is one of meaning by requesting an example from the child's personal background. These results are not definitive. Teacher suggests a situation to the child in which an instance of the concept might occur. Child responds with an illustration and draws an analogy to the situation in the story when the teacher repeats the initial question.

Summary

A survey of the analyses of the foregoing probes shows that the pupil provides cues to his need for help with thinking when he:

1. is unable to utter or complete an explanation of a concept.
2. does not interpret what he has said by defining, illustrating, rephrasing, or giving an example.
3. repeats irrelevant or disconnected ideas.
4. cannot supply data to support a statement or position.
5. is unable to use data in a related or associative situation.
6. cannot derive logical conclusions or make applications in new situations.

The "something specific" cited from Dewey near the beginning of this article is represented among the teaching techniques illustrated in the probes. Instead of relying mainly upon certain classes of questions (what, who, how, why) the teacher follows through on his perception of the pupil's needs, derived from cues in their verbal behavior, by using a variety of questioning strategies to engage in the following process behaviors:

1. Rephrasing questions in order to assist pupil in recognizing the basis for his perception of a problem
2. Assisting the pupil in acquiring data to evaluate and make his own judgments
3. Referring the pupil to resources to support, clarify, and supplement his statements
4. Assisting the pupil in analyzing content useful in summarizing and drawing conclusions
5. Leading the pupil to identify more concrete instances of a concept by suggesting alternatives when he is unable to respond on a more abstract level
6. Drawing upon the pupil's experiences as a source of meanings useful in interpreting unfamiliar situations.

It is of interest to observe that in several probes different results were obtained from identical teacher questions asked at different stages of the strategy. Few questions,

on their own, were sufficient to elicit the response which was facilitated eventually. Only after an appraisal of the complete interactive setting--pupil-teacher relations, verbal sequence and structuring, mutual respect and responsive ambience--does an awareness of the process of promoting the improvement of thinking emerge.

The units dealt with in this article may be narrow in scope but the strategies show the possibilities, even at the first grade level, for developing basic supports for later cognitive and affective structures.

Teachers at the pre-service or in-service levels may hereby be given guidelines for helping the otherwise disadvantaged learner make the difficult transition from the language patterns of the neighborhood to those of the school. In the process he is assisted in developing rewarding and positive feelings of accomplishments as he engages in the expressive activity which accompanies thoughtful behavior.

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Reactions to Dr. Gantt's paper:

1. This position paper was termed "non-controversial."

2. The teacher, not the materials, controls the learning situation. Therefore, materials which might otherwise be boring and irrelevant, can be manipulated and made relevant through skillful teaching.

3. Teachers' low expectations are often at the root of children's failure.

4. Answer-oriented questions would not threaten a child if the teacher used alternate stategies to elicit correct responses when necessary. A child experiences failure when his incorrect response is rejected and another child is called upon for the correct answer.